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Takahiko Kondo

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER

LLP

901 NEW YORK AVENUE, NW

WASHINGTON, DC 20001-4413

EXAMINER

CHANG, VICTOR S

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Art Unit: 1794

NOTE

1. There is no proposed amendment to the claims.
2. Applicants argue at page 8 that Takita does not expressly or inherently anticipate the claimed invention. However, the Office action has clearly pointed out that Takita is silent about 1) the α -olefin co-monomer content of a HDPE copolymer and its melt index (MI); 2) the viscosity average molecular weight (Mv) of a HDPE; 3) the Mv and the total α -olefin co-monomer content of the blend. However, regarding 1), since it is well known that a HDPE is a polymer of ethylene copolymerized with propylene (α -olefin) for a controlled density and properties, as evidenced by the reference Concise Encyclopedia of Polymer Science and Engineering, one of ordinary skill in the art would have interpreted that Takita's teaching inherently encompasses known HDPE with controlled properties, and selecting a HDPE having a workable propylene (α -olefin) content as Takita's B-2 component is deemed to be either anticipated, or obviously provided by practicing the invention of prior art, motivated by the desire to obtain a blend with extrudable melt properties. Similarly, regarding the MI property, since Takita discloses the same subject matter of a polymer blend for the same end use, a workable MI is also deemed to be either anticipated, or obviously provided by practicing Takita's invention. Regarding 2), since the Takita teaches a blend of HDPE over a range of molecular weights, which inherently correspond to a range of viscosity average molecular weights Mv, selecting a HDPE with a workable range of Mv is deemed to be either anticipated by Takita, or an obviously provided by practicing the invention of prior art. Regarding 3), since Takita teaches a blend comprising HDPE, and discloses the same subject matter for the same end use (a HDPE blend for making a microporous battery separator), a workable Mv and total α -

olefin co-monomer content in the blend are also deemed to be either anticipated by Takita, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to obtain the beneficial properties such as melt processibility of a HDPE blend.

Applicants argue at page 9 that

“Evidence that the claimed polyethylene films are not inherently disclosed by Takita is provided, for example, in Example 1 and Comparative Examples 3 and 4, which are discussed at pages 29, 30, 34 and 35 of the specification, and summarized in Table 1 at pages 37 to 40.”

However, nowhere is any evidence that Takita's invention is limited to the scope of the Comparative Examples in Table 1. Applicants are reminded that the basis of rejection is that Takita's invention teaches a blend comprising HDPE, and discloses essentially the same subject matter for the same end use (a HDPE blend for making a microporous battery separator), therefore the claimed elements are deemed to be either anticipated, or obviously provided by practicing the invention of prior art for the same utility through routine optimizations. Further, applicants' statement at page 10 that “Comparative Example 3 ... is believed to fall broadly within the teachings of Takita.” has admitted that HDPE copolymer is within the scope of Takita's teachings.

Applicants argue at page 11 that

“The broad genus disclosed by Takita encompasses a very large number of molecules, and Takita does not provide sufficient specificity to put one skilled in the art in possession of the specific invention claimed by Applicants.”

However, since Takita teaches the same utility as the claimed invention, it is unseen one skilled in the art would have not recognized the general guidance provided by Takita to select an

appropriate HDPE blend, because the utility would have dictated there would be similar required conditions to make and use the same invention.

Applicants argue at page 15 that

“The Examiner contends, without any evidence of such, that Applicants' claimed elements and properties would either be anticipated by Takita or an obvious optimization of Takita, because a person skilled in the art would be motivated to obtain an HDPE blend with beneficial properties, such as melt processibility. However, the desirability of obtaining a certain result does not teach a person skilled in the art how to obtain that result, and Takita simply does not teach a person skilled in the art how to arrive at the claimed invention.”

However, the examiner has clearly pointed out in the Office action mailed 7/19/2007, page 3, that “Takita's membrane is formed by a melt extrusion process. Incorporation of propylene ethylene copolymer improves melt-down temperature and the characteristics of the membrane for battery separators.” It is unseen that Takita does not teach a person in the art how to arrive the claimed invention with beneficiary effects for the same end use, nor is it credible that one of ordinary skill in the art would not have recognized the various required properties for the same end use, and been motivated to optimized them.

Applicants argue at page 18 that

“the claimed invention would not have been obvious to one skilled in the art over Takita.
Moreover, for optimization of a parameter to be obvious, the prior art must recognize that the parameter is a result-effective variable.”

However, applicants fail to provide any evidence that Takita's invention does not encompass the claimed structure and composition. Despite applicants' choice of an alternative description of the same invention, the examiner maintains the rejections as set forth in the previous Office action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 7:00 am - 5:00 pm, Tuesday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.